

PROJECTED MCP AMENDMENT SCHEDULES

I. Perchlorate Public Hearing Draft

Public Hearing Draft to EOE A	April 22, 2005
-------------------------------	----------------

II. Wave 2 Final Amendments

Final Amendments to Executive Office of Environmental Affairs (EOEA)	June 10, 2005
---	---------------

Final Amendments to Administration and Finance	July 1, 2005
--	--------------

Final Amendments to Secretary of State	July 15, 2005
--	---------------

Final Amendments published in MA Register and posted on DEP's website; Amendments to MCP Method 1 numerical standards published as Method 2	August 26, 2005
--	-----------------

DEP/LSP Training	October 2005
------------------	--------------

Final Amendments Effective Date	December 1, 2005 [*]
---------------------------------	-------------------------------

III. Asbestos In Soil

Pilot Project

DCAM Pilot Project field work completed (awaiting data)	week of April 11, 2005
--	------------------------

North Point Park Pilot Project field work	end of May – August 2005
---	--------------------------

Draft of reworked regulations available (this draft will be modified to reflect Pilot Test results once tests are completed/evaluated)	July 1, 2005
--	--------------

IV. Spring '05 Public Hearing Draft

Work Group Meeting, DEP Boston, 2 nd floor, 9:30 – 11:30 a.m.	May 16, 2005
---	--------------

* Effort will be made to coordinate effective dates of the various packages.

BWSC Advisory Committee Meeting

05/05/05

Paul W. Locke
MADEP BWSC
617-556-1160
Paul.Locke@state.ma.us



Wave 2

Where is it? What happened to it? When will it be final?

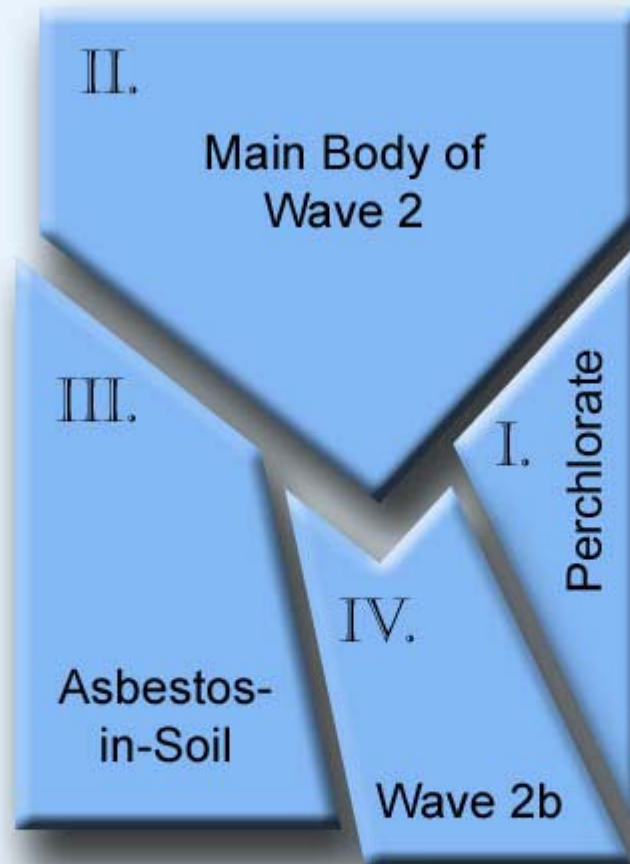
WAVE 2

1999 - 2005

Massachusetts Department
of

ENVIRONMENTAL PROTECTION





I. PERCHLORATE

- December 2004: Public Comment Period Ended
- January 2005: NAS Released Perchlorate Report
- January – February 2005: MADEP Reconvened Perchlorate Science Panel to Review NAS Report
- April 2005: DEP Prepares New Perchlorate Package for Public Comment

- Current Status: Final Internal Review

I. PERCHLORATE

Contents of New Perchlorate Package:

- MADEP Maximum Contaminant Level (MCL) for Drinking Water
- MADEP MCP Numerical Standards
- MCP Language to insure consistency between MCP and Drinking Water Regulations
- Documentation, Discussion, etc...



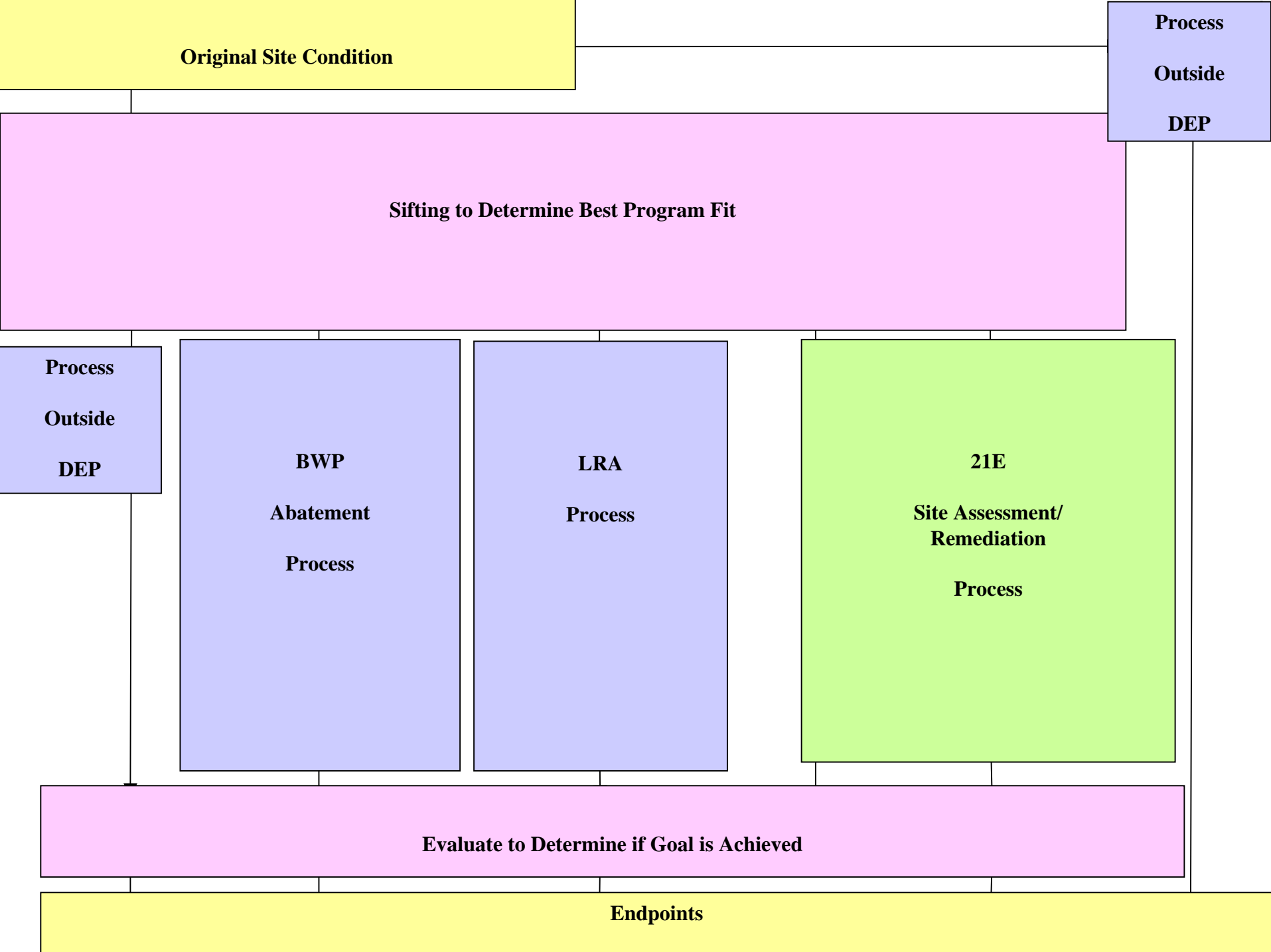
I. PERCHLORATE

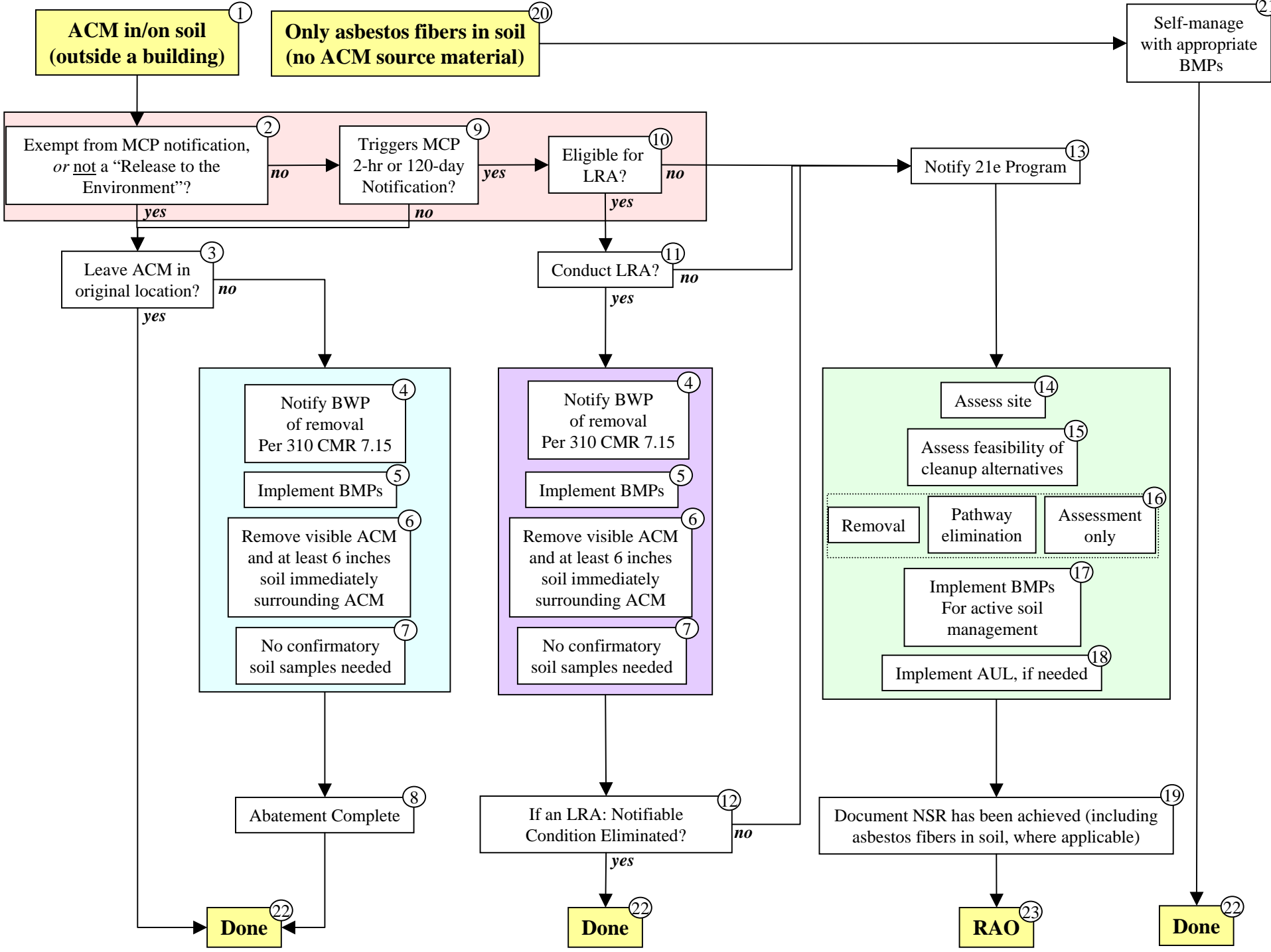
- BWSC/DWP Consistency Concept:

The acceptability of supplied by a DEP-regulated Public Water Supply System for short-term use shall be determined based on DEP Water Supply criteria

II. ASBESTOS-IN-SOIL

- December 2004 – Public Comment Period ended
- January – Present: AIS Workgroup Meeting
- April – August(?): Pilot Projects conducted
- Current Status: Developing revised regulations, awaiting results of Pilot Projects





Proposed MCP Notification Requirements Applicable to Asbestos

2-hour

120-day

No MCP Notification

**>1 lb (RQ) Release
within 24 hours**

Imminent Hazards

**Debris containing friable
asbestos on soil surface
near receptors¹**

**Debris containing releasable
asbestos on the soil surface or
mixed in the soil, at concentrations
greater than $X \text{ g}_{\text{ACM}}/\text{kg}_{\text{soil}}$,
including:**

- Debris containing friable asbestos on soil surface *away from* receptors;
- Debris containing friable asbestos at any depth below the soil surface
- Debris containing releasable asbestos at any depth.

**“Facility Components” that are
substantially intact**

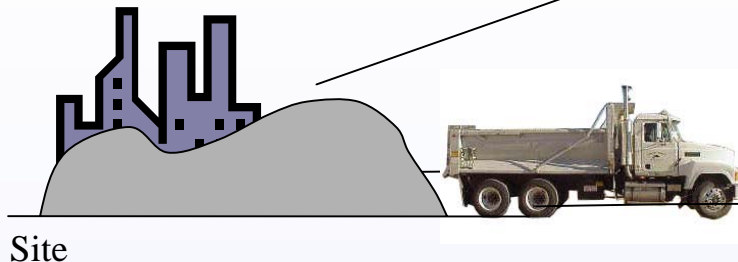
**Debris that does not contain
friable or releasable asbestos
regardless of concentration**

**Only unconsolidated asbestos
fibers in soil from non-
manufacturing sources.**

¹ Written similar to 310 CMR 40.0321: on soil surface soil at any location within 500 feet of an occupied building, school, playground, recreational area or park.



AIS Pilot: What we Know, What we Don't Know, and How We'll Attain Enlightenment



Site

KNOWN:

- Asbestos fibers in air can create risk
- Some amount of fibers in soil can/will get into air if soil is disturbed by wind or mechanically
- BMPs effective for preventing exposure during storage and bulk loading of AIS
- Capping/covering is effective for preventing exposure to AID

UNKNOWN:

- Threshold for bringing sites into MCP
- Risks resulting if BMPs are not employed during loading
- Risks resulting from leaving material on-site and surficial

KNOWN:

- PM10 levels from normal landfill operations, including use/stockpiling of daily cover

UNKNOWN:

- Asbestos levels in fugitive dust from normal landfill operations using AIS, including disposal and use/stockpiling of daily cover
- Potential risk to landfill workers
- Potential risks to adjacent receptors

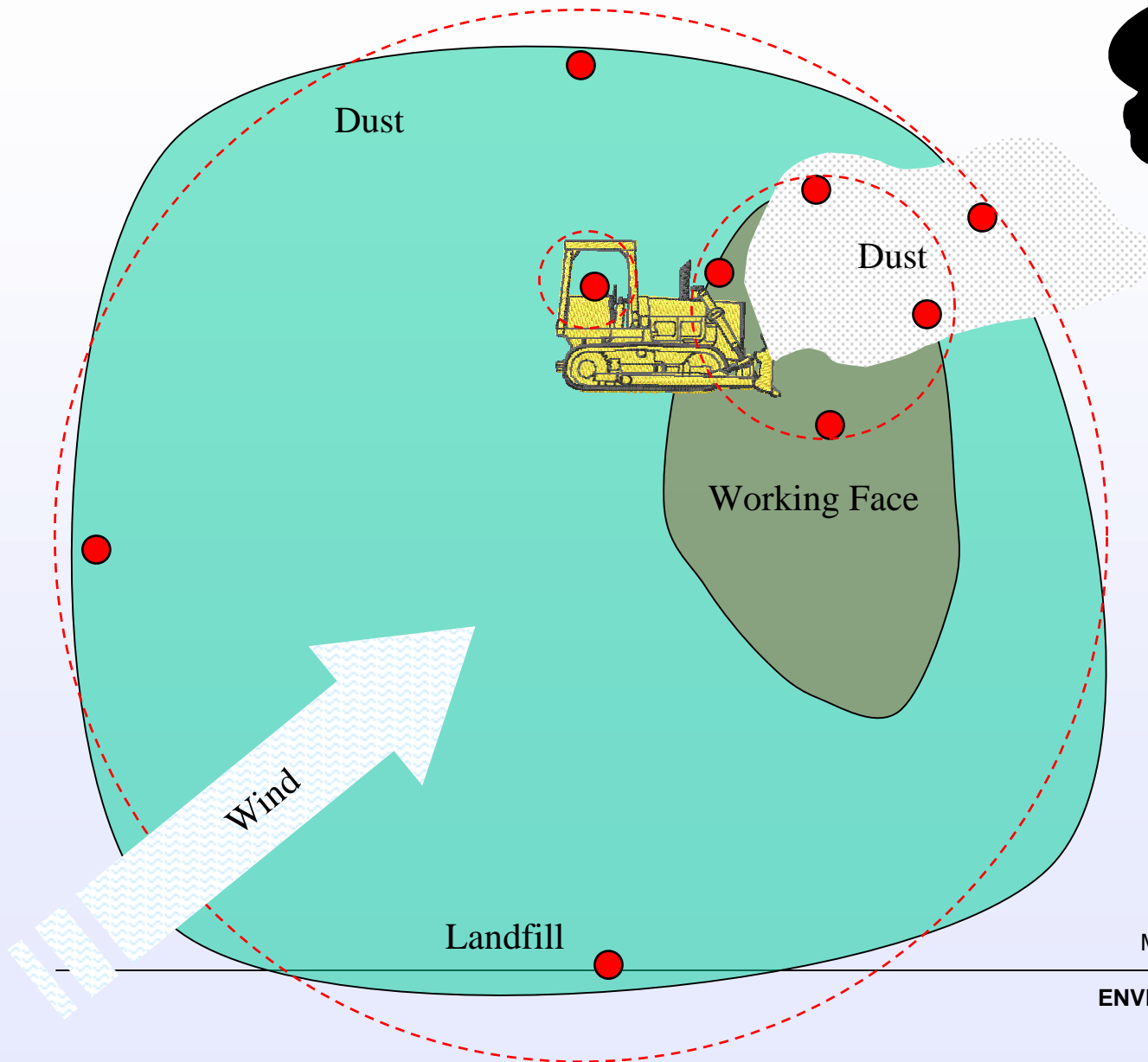


Landfill

Massachusetts Department
of

ENVIRONMENTAL PROTECTION





Massachusetts Department
of
ENVIRONMENTAL PROTECTION



● - PM10 and asbestos monitoring

Classification & Fate Of Soil Contaminated with Asbestos

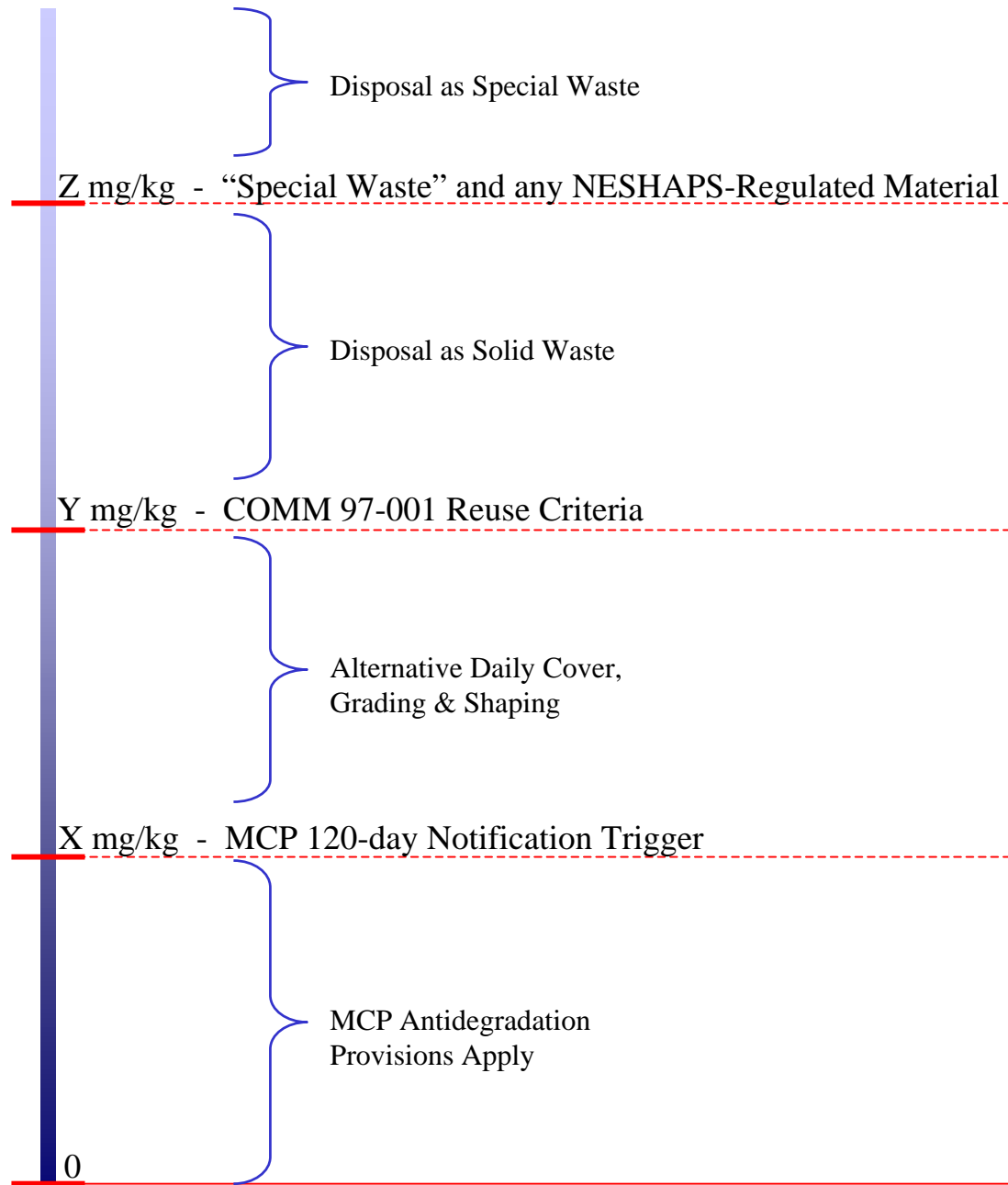
DRAFT

Concentrations Resulting from
Measuring the Weight of ACM
(*Not Asbestos Fibers*) in Soil Using
a Sieving Technique.

Example:

- 8 oz sample dried, weighed
- sieve using #4 mesh
- identify, count & weigh ACM pieces on sieve
- ACM identified using standard bulk soil analyses

Weight of ACM Pieces per Kg of Soil



IV. WAVE 2B

Consists of 3 pieces:

1. Text Provisions that are new, not previously submitted for public comment
2. Numerical Standards that were not proposed to change in Fall 2004 version.
3. Numerical Standards that changed significantly as a result of public comment

IV. WAVE 2B

New Text Provisions

- Discussion Meeting 5/16, 9:30-12:00
- Monitoring/Remediation Well Closure
- Contingency Planning
- Petroleum Hydrocarbons in Certain GW-1 Areas

IV. WAVE 2B – TEXT PROVISIONS

- **Monitoring/Remediation Well Closure**
- Ensures consistency with US Environmental Protection Agency requirements for Underground Injection Control (UIC)
- Proposed provision is consistent with DEP guidance for well closure (*Standard References for Monitoring Wells* and *Private Well Guidelines*) and definitions in 313 CMR 3.00, the Commonwealth's well driller regulations.

IV. WAVE 2B – TEXT PROVISIONS

•Contingency Planning

Pursuant to Section 6 of M.G.L. chapter 21E, “Department requirements for prevention and control of releases; restrictions on property; notice” provides the Department with the authority to “specify reasonable requirements, applicable to sites and vessels where releases of hazardous material or oil might occur and to activities which might cause, contribute to, or exacerbate a release of hazardous material or oil, to prevent and control, and to counter the effects of, such releases.” The proposed amendments to 310 CMR 40.0101 are intended to reflect this authority in the regulations.

IV. WAVE 2B – TEXT PROVISIONS

Petroleum Hydrocarbons in Certain GW-1 Areas

Petroleum sites at a distance from an existing public water supply well would be allowed to demonstrate a condition of No Significant Risk as part of their Method 3 Risk Characterization, including the use of modeling and other evaluation techniques.

Such sites may become eligible for a Class A or Class B RAO, whereas many currently have Class C RAOs.



IV. WAVE 2B – NUMERICAL STANDARDS

- Many (not all) MCP Standards were proposed to change in Fall 2004
- Public Comment Period ended December 2004
- Many general comments on Numerical Standards affected *all* standards, not just those proposed to change in 2004
- DEP BRP & ORS Updated list of Drinking Water Standards and Guidelines after Wave 2 was prepared/approved
- Given need to submit *new* changes for public comment, DEP will also include those that would change significantly based on Fall 2004 Public Comments

IV. WAVE 2B – NUMERICAL STANDARDS

ACENAPHTHENE

ACENAPHTHALENE

ACETONE

ANTHRACENE

BENZO(g,h,i)PERYLENE

BERYLLIUM

BIS(2-

CHLOROISOPROPYL)ETHER

BIS (2-

ETHYLHEXYL)PHTHALATE

BROMOMETHANE

CHLOROFORM

CHLOROPHENOL, 2-

CHRYSENE

DICHLOROPROPENE, 1,3-

DIOXANE, 1,4-

ETHYLBENZENE

FLUORENE

HMX

METHYL ETHYL KETONE

METHYLNAPHTHALENE, 2-

N-NITROSODIMETHYLAMINE (NDMA)

PETROLEUM HYDROCARBONS

ALIPHATICS

C5 - C8

C9 - C12

C8 - C18

C19 – C36

PHENANTHRENE

POLYCHLORINATED BIPHENYLS (PCBs)

RDX

Massachusetts Department
of

ENVIRONMENTAL PROTECTION



II. MAIN BODY OF WAVE 2 CHANGES

Final Amendments to Executive Office of
Environmental Affairs (EOEA)

June 10, 2005

Final Amendments to Administration and Finance

July 1, 2005

Final Amendments to Secretary of State

July 15, 2005

Final Amendments published in MA Register
and posted on DEP's website; Amendments to
MCP Method 1 numerical standards published
as Method 2

August 26, 2005

DEP/LSP Training

October 2005

Final Amendments Effective Date
2005*

December 1,



Final “Wave 2” MCP Amendments

May 5, 2005
WSC Advisory Committee Meeting

Liz Callahan, MA DEP
elizabeth.j.callahan@state.ma.us
(617) 348-4056



Significant Changes from Public Hearing Draft to Final

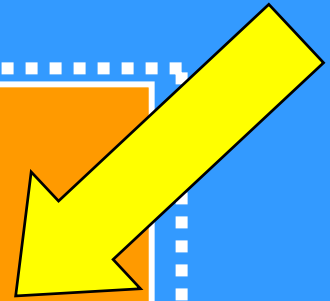
- Front End
- Public Involvement
- Subpart I & J, other

I. Perchlorate

III. Asbestos in
Soil

IV. Spring '05
Public Hearing
Draft

II. Main Body
of Wave 2



Providing Sampling Results to Property Owners

- Public hearing draft - proposed property owner needed to request results
- Final – property owner is notified that the sampling results will be provided; results are provided within 15 days from the date issued by lab
- Does not create notification obligation for property owner (notification exemption exists if DEP was previously notified of disposal site)

Provide Local Officials with Copy of RNF

- Change made but modified
 - requirement to include local assessor's map and parcel numbers with notice was not included
- This provision is related to another change requiring PRPs to include release/site coordinates in RNF to improve location information

Notify Local Officials Prior to Release Abatement Measure

- Public hearing draft – notify “within 7 days prior” to implementing RAM
- Final change – provide notice “within the 20 days prior to”

Change from Legal Notices to Ads

- Public Hearing Draft - public notice shall be published as an ad in local news section unless the newspaper disallows it or ad exceeds cost of comparably sized legal notice by 20% or more
- Final - change made as proposed

Notice to “Affected Individuals” of IRA to Address IH or CEP

- Notice timeframe change from 48 to 72 hrs, except when DEP requires otherwise
- Notice more clearly limited to “Affected Individuals”
- Added requirement to provide the same individuals with notice upon completion of IRA

Notice to Property Owners within Boundaries of Disposal Site

- Change - For property owners notified at the conclusion of Phase II, subsequent notice will be required upon submittal of Class A or B RAO
- Standard Notice will be created by DEP

Notice to Disposal Site Abutters

- Proposal withdrawn
 - Numerous difficulties cited with implementation of proposal
 - Existing and new (Wave 2) public involvement provisions provide notice of key response action milestones and opportunity to comment

Notice to Public Water Suppliers

- Public Hearing Draft - At time of Tier I Permit if groundwater concentrations exceed GW-1 in Zone II, IWPA or Zone A
- Final – change made with modification that subsequent notice be provided upon submittal of Class A or B RAO

Expanded Public Involvement Activities for non-PIP sites 40.1403(9)

- Public Hearing Draft - expanded provision of public comment period and information repository for any Preliminary Response Action or Comprehensive Response Action, upon request of local officials or ten or more residents
- Final – not expanded beyond existing provisions for IRAs and RAMs; added specifics proposed on timeframe for comment periods and preparation of comment summary

Public Comment Period for Tier II Classifications

- Public Hearing Draft- proposed a 20 day comment period for Tier II Classifications (analogous to Tier I Permits)
- Final regulations – change not made; the comment period not warranted for less serious/complex Tier II sites

Special Project Designation

- Public Hearing Draft –
 - SPD expanded to apply to deadlines for Comprehensive Response Actions and to include to “Eligible Persons” under 21E as eligible applicants
 - SPD permit process changed to a presumptive approval
- Final – proposed changes made with modifications:
 - added provision to allow transfer of SPD
 - added exception to annual municipal SPD cap
 - clarified effective date and duration



Construction-Related RAMs

- Public Hearing Draft — provided for RAMs during construction of “a permanent structure that could impede reasonably likely response actions,” provided focused site assessment, feasibility evaluation and risk characterization are done
- Final — change made with modifications
 - dropped “permanent,” dropped “reasonably”
 - added requirement to RAM plan that the location of the structure be included in the plan
 - RAM transmittal form will include check off for construction of structure as part of RAM

Notification Exemption for Arsenic & Beryllium in Specific Locations

- Public Hearing Draft – proposed exempting arsenic in Worcester County soils and arsenic and beryllium in Boston Blue Clay that is “ubiquitous and consistently present” and consistent with geologic and ecologic conditions
- Final – made change with modifications
 - expanded to include arsenic in soil or groundwater
 - dropped “ubiquitous”
 - did not expand to include fill, as suggested in some comments



Remedial ~~System~~ Monitoring Report

Public Hearing Draft to Final –

- content of form has been finalized; electronic version available August 2005
- reporting periods simplified from four to two
 - » monthly for IH and SRM conditions
 - » every 6 months for all others, lines up with Status reports

Note: reporting periods are different from monitoring frequencies

- Related minor change to monitoring frequency for discharges to ground or surface (40.0045) to make consistent with new EPA general discharge permit
 - » From 1,3,6,21 to 1,3,6,weekly for first month
- Added provision in 40.0008 that says no hardcopy required for RMR



Phase II Site Map

- Public Hearing Draft – represent horizontal and vertical extent of contamination
- Final – indicate the boundaries of the disposal site, in plan view, and as appropriate, the vertical extent of contamination

Remedy Operation Status

- Public Hearing Draft –
 - expanded to apply to remedies that employ “Active Remedial Monitoring Programs
 - new parties can sign on through ROS Modification
 - ROS can be maintained during planned shutdowns
 - Final – changes made as proposed, with clarifications
- * Did not include provision to allow changing remedy as a ROS modification

Class C Response Action Outcome

- Public Hearing Draft – created two subcategories of Temporary Solutions
 - C-1 Substantial Hazards eliminated; no Permanent Solution exists; Periodic Evaluation
 - C-2 Substantial Hazards eliminated; Permanent Solution feasible; response actions toward PS continue
- Final – changes made
 - Added transition period; upon effective date all existing Class Cs will be Class C-1 until DEP hears otherwise
 - Definitions added for No Substantial Hazard and Substantial Hazard

Remedial Actions after an RAO

- Public Hearing Draft –
 - At sites without AULs, no plans, submittals required; Follow requirements for managing Contaminated Media and Debris
 - At Sites with AULs, thresholds apply, over which RAM plans required prior to work
- Final – changes made as proposed with significant clarifications, e.g.,
 - Improved cross-referencing to procedures for amending AULs
 - Clarified that RAMs may be conducted after Class C RAOs

Reporting – Release that could pose Imminent Hazard

- Public Hearing Draft – two options
 - Option 1 – any sample within top 12 inches can trigger notification
 - Option 2 – if more than one sample, sample closest to surface should be used to determine notification obligation
- Final – Option 1 selected

Imminent Hazard Evaluations

- Public Hearing Draft
 - Primary consideration given to DEP-derived toxicity values
 - Hazard Index for certain chemicals reduced from 10 to 1 (cyanide, lead, perchlorate)
 - List of specific chemicals and concentrations considered IH in drinking water
- Final
 - Change made
 - Modified to apply to OHM that have potential to cause serious effect following short-term exposures, e.g., lead, cyanide
 - Change was not made

Private Well Closure

- Public Hearing Draft – proposed eliminating Grant of Environmental Restriction for private drinking water wells when location is tied to new water supply and well is no longer used for drinking water.
- Final – change made with provision that if well is kept in service for other use, a Notice of Activity and Use Limitation is required to specify that the well is not a drinking water source.

Documenting Marginal Reference Requests

- Public Hearing Draft – provided two new means of proof that the AUL is referenced on the deed
 - A copy of first page of AUL with bearing book/page no. and registry stamp indicating request was made
 - A receipt of payment bearing book/page no...
- Final – added a third means of proof
 - A copy of the electronic reference on the abstract of the deed and a copy of the first page of the reference deed to verify that it is the correct deed



New Notary Language on AUL Forms

- Implements Executive Order No. 455 (Standards of Conduct for Notary Public)
- “Acknowledgement” language from Executive Order added to the notary section of every AUL form

Data Usability Evaluation

- Public Hearing Draft – RAO must include a Data Usability Assessment documenting that data relied upon to support RAO is scientifically valid and defensible, and of a sufficient level of precision, accuracy, and representativeness
- Final – change made as proposed

Pilot Test Definition

- Public Hearing Draft – “...A Pilot Test shall be considered assessment if it is conducted for a duration of no more than 7 consecutive days and involves only soil vapor and/or groundwater extraction, otherwise it shall be considered remediation.”
- Final – changed duration to 21 consecutive days; added NAPL extraction

Engineered Barriers

- Public Hearing Draft – sought comment as to whether limits should be placed on site use where engineered barriers is used over highly toxic materials, chemicals with lethal effects
- Final - no limitations imposed

Projected Schedule/Effective Date

Final Amendments to EOEA

June 10, 2005

Final Amendments to A&F

July 1, 2005

Final Amendments to SOS

July 15, 2005

Final Amendments

August 26, 2005

- Published in MA Register
- Posted on DEP's website
- Numerical Standards published as Method 2

Training

October 2005

Effective Date

December 1, 2005 *

* Effort will be made to coordinate effective dates of various packages.



Questions ?

